

Abstract

A digital direct access arrangement (DAA) circuitry may be used to terminate the telephone connections at the user's end to provide a communication path for signals to and from the phone lines. Briefly described, a means for providing a proper hookswitch transition for a variety of international phone standards is provided. The invention may also be utilized with means for transmitting and receiving a signal across a capacitive isolation barrier. More particularly, a DAA circuitry may be utilized which satisfies many or all hookswitch transition standards without the use of additional discrete devices. The hookswitch transition standards may be satisfied by ramping down the current flowing through the hookswitch prior to transitioning the hookswitch state. In this manner the hookswitch current change as a function of time (di/dt) may be decreased. Thus, the current through the hookswitch may be actively controlled prior to switching the hookswitch from an off-hook condition to an on-hook condition. By controlling the current drawn from the phone lines through the hookswitch, the maximum voltage seen at the phone company exchange may be decreased.